

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

By virtue of the amendments above, claims 1, 4-9, 19, 22-28, 31-32, 34-37, 40-61, 64-80, and 110-116 have been amended, and claims 2-3, 20-21, 29-30, 38-39, and 62-63 have been canceled without prejudice or disclaimer of the subject matter therein. Claims 10-18, 33, and 81-109 were previously canceled without prejudice or disclaimer of the subject matter therein. Accordingly, claims 1, 4-9, 19, 22-28, 31-32, 34-37, 40-61, 64-80, and 110-116 are pending in the present application, of which claims 1, 19, 28, 37, and 61 are independent.

Claims 1, 19, 28, 37, and 101 were rejected under 35 U.S.C. §103(a) as allegedly being anticipated by Nishi et al. (RE39,318) (“Nishi”) in view of AAPA (paragraphs 16-17 of the instant patent application).

Claims 2-9, 20-27, 29-32, 34-36, 38-80 and 110-116 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nishi in view of AAPA and further in view of Takayama (6,512,791).

These rejections of claims 2-3, 10-18, 20-21, 29-30, 38-39, 62-63 and 109 are moot in view of their cancellation above. Further, the rejections of the pending claims are traversed for at least the reasons stated below.

Claim Rejections Under 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S., 82 USPQ2d 1385 (2007):

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be

sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

Claims 1, 19, 28, and 37

Claims 1, 19, 28, and 37 were rejected under 35 U.S.C. §103(a) as allegedly being anticipated by Nishi in view of AAPA.

Claim 1 recites the following features, which have been similarly recited in claims 19, 28, and 37:

wherein when said two dimensional array of said two dimensional array frequency coefficients comprises 4 columns of frequency coefficients and 4 rows of frequency coefficients, said method further comprises:

representing said columns with a variable $n=0, 1, 2, \text{ or } 3$, wherein $n=0$ is at least one of a first or leftmost column, $n=1$ is a second column, $n=2$ is a third column, and $n=3$ is at least one of a fourth or rightmost column;

representing said rows with a variable $m=0, 1, 2, \text{ or } 3$, wherein $m=0$ is at least one of a first or top row, $m=1$ is a second row, $m=2$ is a third row, and $m=3$ is at least one of a fourth or bottom row; and

sequentially scanning said two dimensional array of said two dimensional array frequency coefficients in a sequential scanning order that is vertically biased, said **sequential scanning order starting at 0 and ending at 15** and producing said one dimensional array of said one dimensional array frequency coefficients wherein said step of **sequentially scanning** said two dimensional array frequency coefficients in a vertically

biased manner comprises:

assigning a scanning order = 0 for a two dimensional array frequency coefficient located at $n=0$ and $m=0$;

assigning a scanning order = 1 for a two dimensional array frequency coefficient located at $n=0$ and $m=1$;

assigning a scanning order = 2 for a two dimensional array frequency coefficient located at $n=1$ and $m=0$;

assigning a scanning order = 3 for a two dimensional array frequency coefficient located at $n=0$ and $m=2$;

assigning a scanning order = 4 for a two dimensional array frequency coefficient located at $n=0$ and $m=3$

assigning a scanning order = 5 for a two dimensional array frequency coefficient located at $n=1$ and $m=1$;

assigning a scanning order 6 for a two dimensional array frequency coefficient located at $n=1$ and $m=2$;

assigning a scanning order = 7 for a two dimensional array frequency coefficient located at $n=1$ and $m=3$;

assigning a scanning order = 8 for a two dimensional array frequency coefficient located at $n=2$ and $m=0$;

assigning a scanning order = 9 for a two dimensional array frequency coefficient located at $n=2$ and $m=1$;

assigning a scanning order = 10 for a two dimensional array frequency coefficient located at $n=2$ and $m=2$;

assigning a scanning order = 11 for a two dimensional array frequency coefficient located at $n=2$ and $m=3$;

assigning a scanning order = 12 for a two dimensional array frequency coefficient located at $n=3$ and $m=0$;

assigning a scanning order = 13 for a two dimensional array frequency coefficient located at $n=3$ and $m=1$;

assigning a scanning order = 14 for a two dimensional array frequency coefficient located at $n=3$ and $m=2$; and

assigning a scanning order = 15 for a two dimensional array
frequency coefficient located at $n=3$ and $m=3$.

Nishi fails to teach or suggest at least the above-recited features. Instead, Nishi discloses an image processing method for setting a processing order for coding the frequency components corresponding to an image signal. Nishi at Abstract. However, Nishi fails to teach or suggest, when a two dimensional array of said two dimensional array frequency coefficients comprises 4 columns of frequency coefficients and 4 rows of frequency coefficients, sequentially scanning the two dimensional array of said two dimensional array frequency coefficients in a sequential scanning order starting at 0 and ending at 15 that are assigned in the order as recited in claim 1 and as similarly recited in claims 19, 28, and 39.

AAPA fails to cure the above-discussed deficiencies of Nishi. Instead, AAPA at paragraph 16 of the instant application discloses that “[i]t is preferable for the encoder to first scan the high-energy low frequency coefficients and then scan the low-energy high frequency coefficients.” However, AAPA fails to teach or suggest the above-discussed features of claims 1, 19, 28 and 39.

Thus, for at least the foregoing reasons, the proposed combination of Nishi and AAPA fails to teach or suggest all of the features of claims 1, 19, 28 and 39. The Office Action has thus failed to establish that claims 1, 19, 28 and 39 are *prima facie* obvious. The Examiner is therefore respectfully requested to withdraw the rejection of claims 1, 19, 28 and 39 and to allow these claims.

Claims 4-9, 22-27, 31-32, 34-36, 38-61, 64-80, and 110-116

Claims 4-9, 22-27, 31-32, 34-36, 38-61, 64-80, and 110-116 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nishi in view of AAPA and further in view of Takayama. This rejection is traversed for at least the following reasons.

Independent claim 61 recites features similar to those discussed above for claim 1. Claims 4-9, 22-27, 31-32, 34-36, 38-60, 64-80, and 110-116 variously depend from independent claims 1, 19, 28, 27, and 61. Thus, for at least the same reasons set forth with respect to claim 1, Nishi and AAPA, either alone or in combination, fail to teach or suggest the above-discussed features of claims 1, 19, 28, 27, and 61.

Takayama fails to cure the above-discussed deficiencies of Nishi and AAPA. Instead, in reference to Fig. 2, Takayama discloses transforming a coefficient of a DC component into one-dimensional predicted code. Takayama at column 12, lines 35-37. However, Takayama fails to teach or suggest the above-discussed features of claims 1, 19, 28, 27, and 61.

Thus, for at least the foregoing reasons, the proposed combination of Nishi, AAPA, and Takayama fails to teach or suggest all of the features of claims 4-9, 22-27, 31-32, 34-36, 38-61, 64-80, and 110-116. The Office Action has thus failed to establish that claims 4-9, 22-27, 31-32, 34-36, 38-61, 64-80, and 110-116 are *prima facie* obvious. The Examiner is therefore respectfully requested to withdraw the rejection of claims 4-9, 22-27, 31-32, 34-36, 38-61, 64-80, and 110-116 and to allow these claims.

Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 503290.

Respectfully submitted,

Dated: October 9, 2008

By /Jung H. Kim 51,299/
Jung H. Kim
Registration No.: 51,299
(703) 652-3820

Ashok K. Mannava
Registration No.: 45,301
(703) 652-3822

MANNAVA & KANG, P.C.
11240 Waples Mill Road
Suite 300
Fairfax, VA 22030
(703) 865-5150 (facsimile)